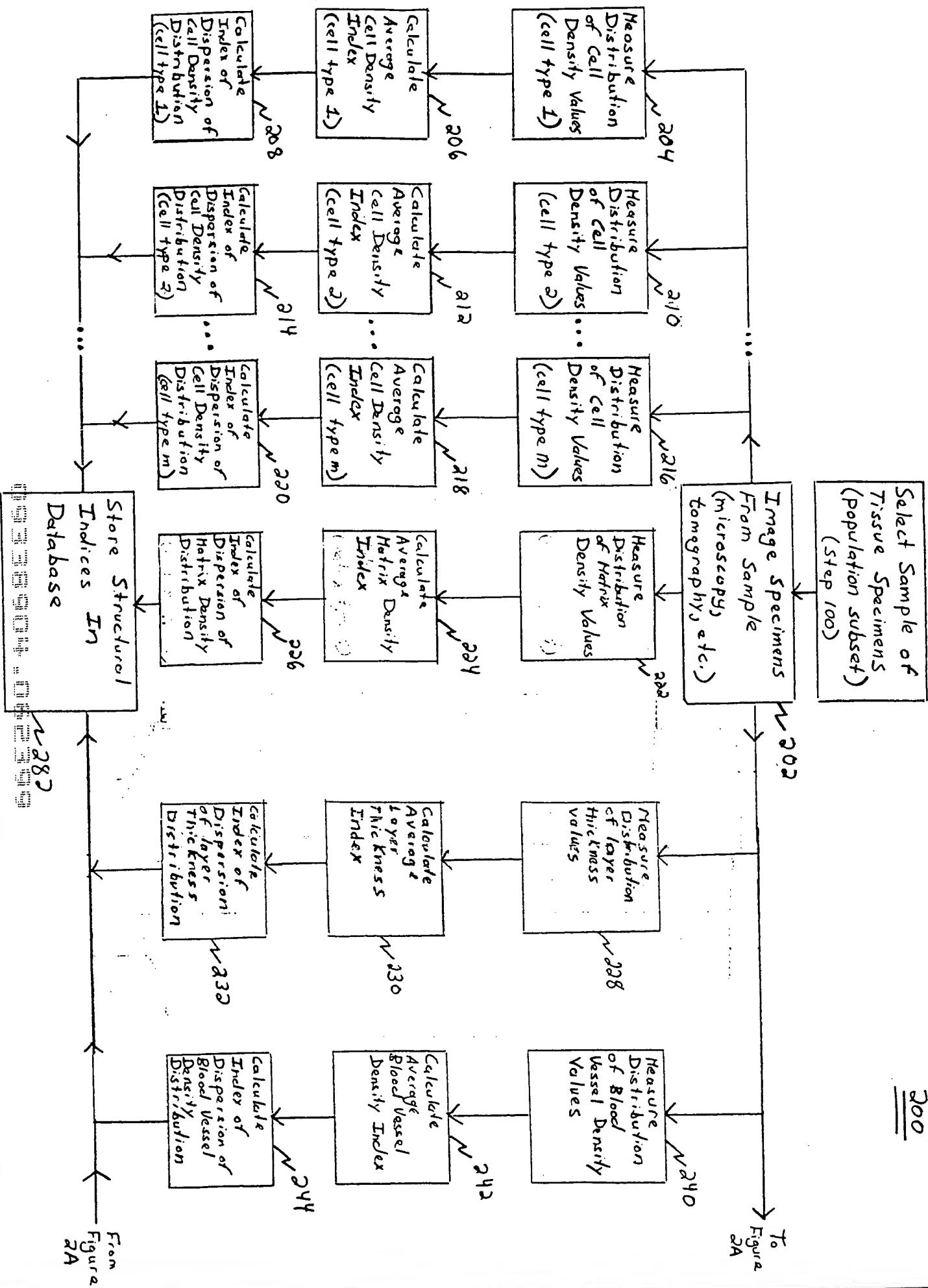


Figure 1



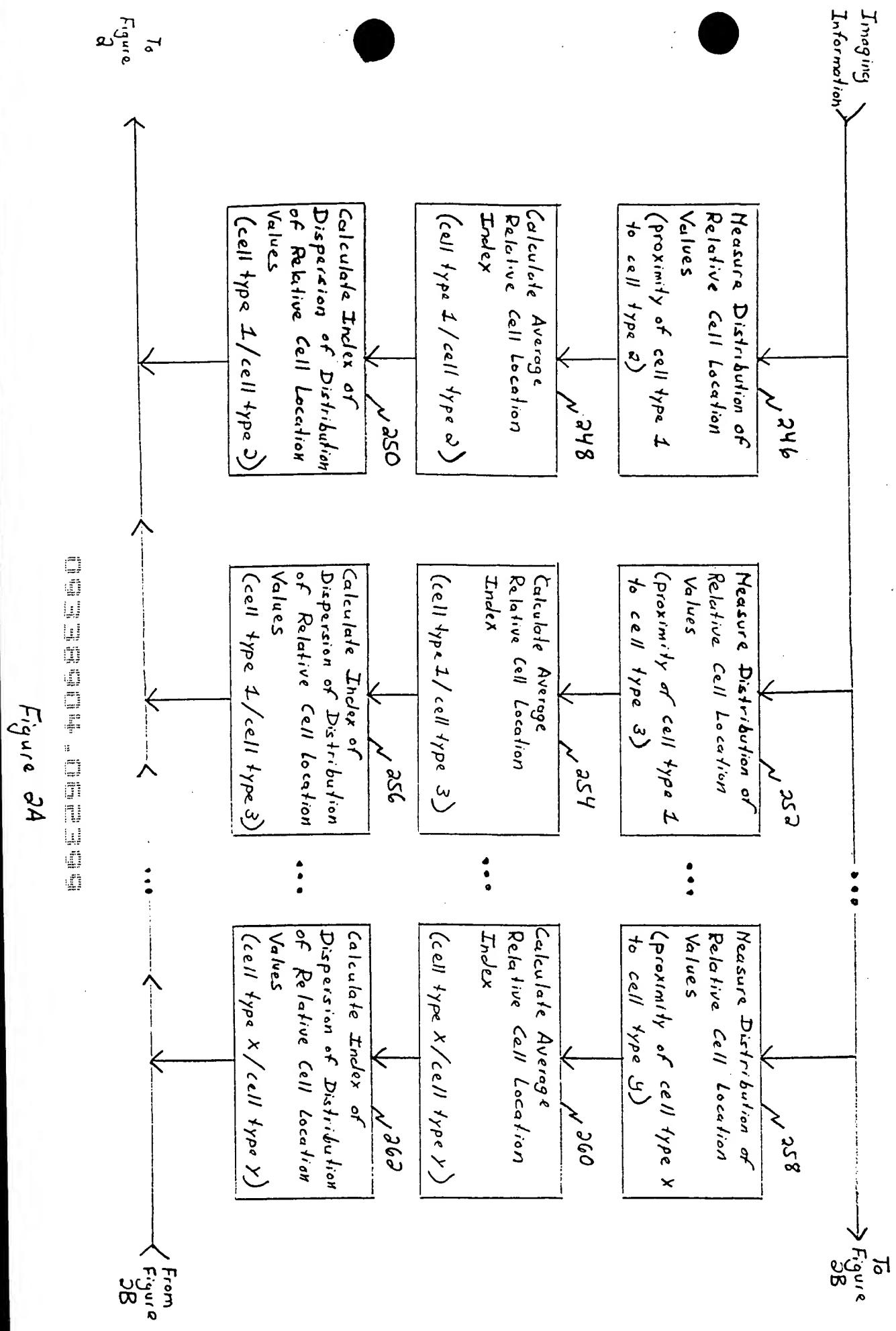
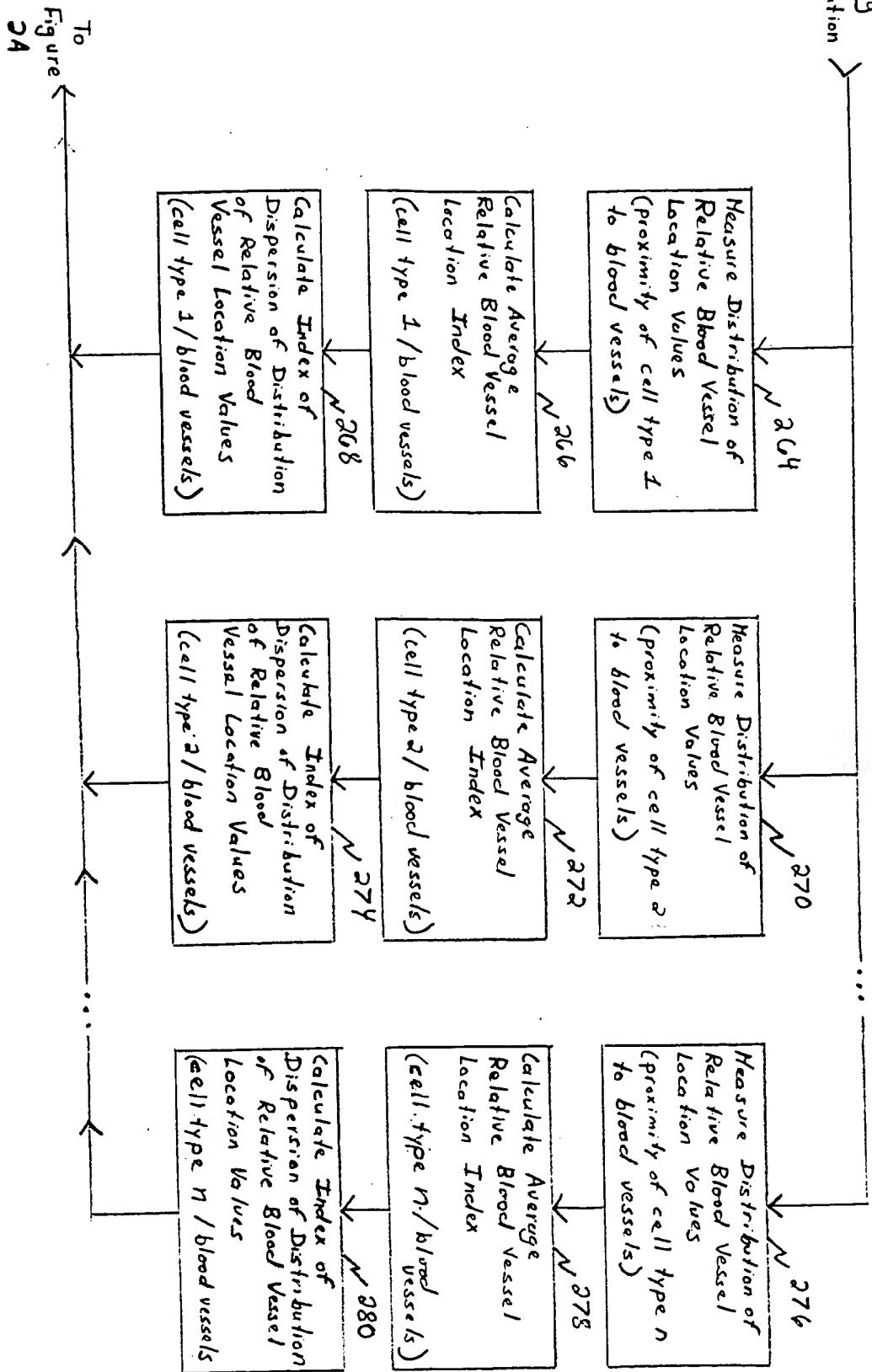


Figure 2A

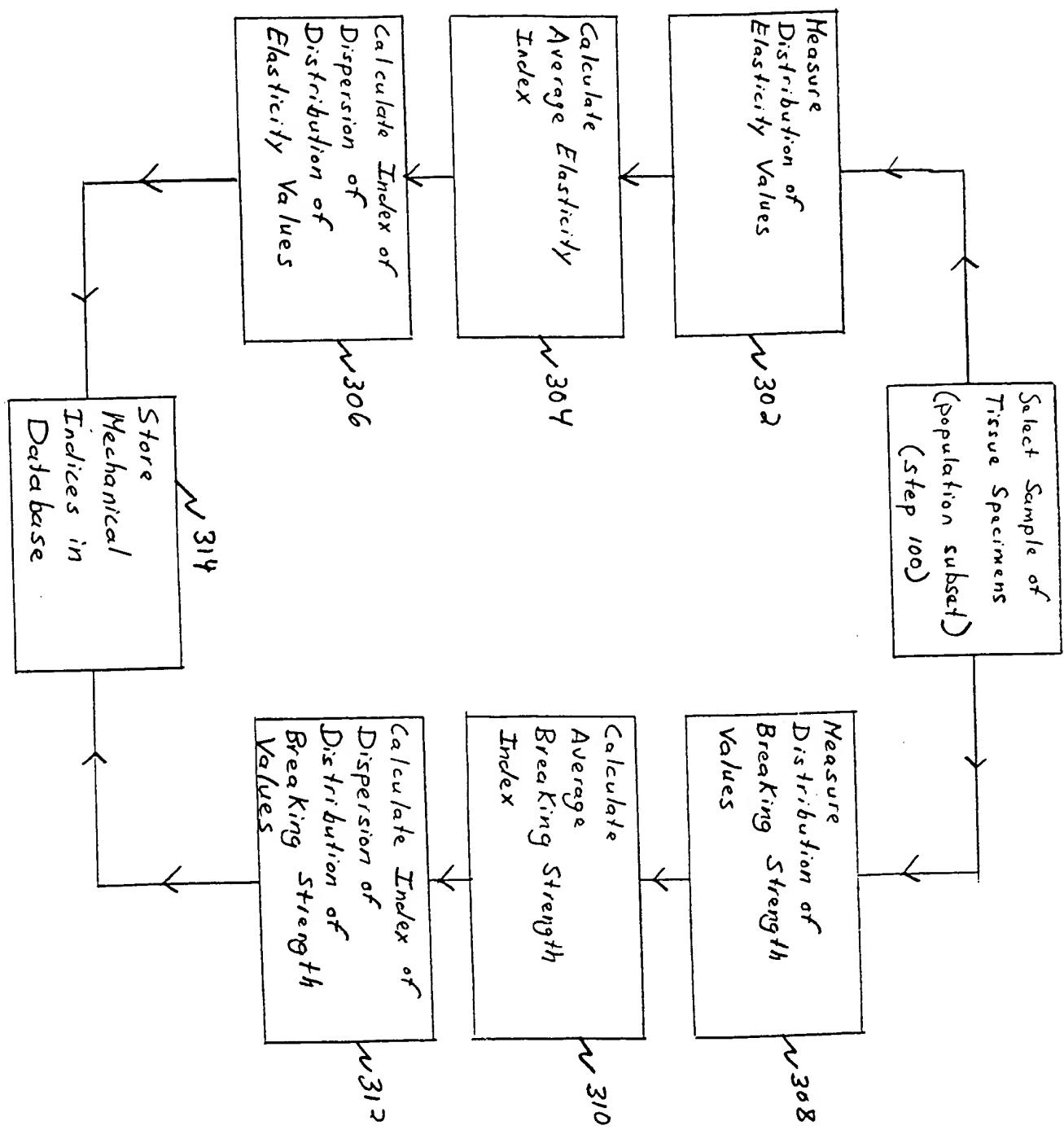
Imaging
Information



To
Figure
2A

Figure 2B

093897-062399



11300

Figure 3

400

Select Sample of
Tissue Specimens
(Population 50% subselected)

Perform cell function
assay(s) on Tissue
Specimens

400

Identify Type(s)
of DNA in
Sample

~ 404

Identify Type(s)
of mRNA in
Sample

~ 408

Identify Type(s)
of Cellular Proteins in
Sample

~ 412

Identify Type(s)
of Cellular Lipids in
Sample

~ 416

Identify Type(s)
of Cellular Ions
distributions in
Sample

~ 420

For each type of DNA
in Sample Calculate:
• Average Amount,
Index

• Index of Dispersion

• About Average
Amount

• Average Location

• Index of Dispersion

• About Average Location

For each type of mRNA
in Sample Calculate:
• Average Amount,
Index

• Index of Dispersion

• About Average Amount

• Average Location

• Index of Dispersion

• About Average Location

For each type of cellular
Protein in Sample
Calculate:
• Average Amount Index

• Index of Dispersion

• About Average Amount

• Average Location

• Index of Dispersion

• About Average Location

For each type of cellular
Lipid in Sample
Calculate:
• Average Amount Index

• Index of Dispersion

• About Average Amount

• Average Location

• Index of Dispersion

• About Average Location

For each type of cellular
Ion distribution in
Sample calculate:
• Average Amount Index

• Index of Dispersion

• About Average Amount

• Average Location

• Index of Dispersion

• About Average Location

Form Cell
Function Map and
Store in
Database

~ 424

Store Cell Function
Indices in
Database

~ 426

Tissue Population	Type Type	Race of Population	Gender of Population	Age Bracket of Population	Geographic Location of Population
Tissue Layer No.					
Average Layer Thickness					
Index of Dispersion About Average Thickness					
Average Cell Density Index (cell type 1)					
Index of Dispersion About Average Cell Density (cell type 1)					
Average Cell Density Index (cell type 2)					
Index of Dispersion About Average Cell Density (cell type 2)					
		8			
Average Cell Density Index (cell type m)					
Index of Dispersion About Average Cell Density (cell type m)					
Average Matrix Density Index					
Index of Dispersion About Average Matrix Density (matrix type 1)					
Average Relative Cell Location Index (cell type 1 / cell type 2)					
Index of Dispersion About Average Rel. Loc. Index (cell type 1 / cell type 2)					
Average Relative Cell Location Index (cell type 1 / cell type 3)					
Index of Dispersion About Average Rel. Loc. Index (cell type 1 / cell type 3)					
		8			
Average Relative Cell Location Index (cell type x / cell type y)					
Index of Dispersion About Average Rel. Loc. Index (cell type x / cell type y)					
Average Relative Blood Vessel Loc. Index (cell type 1 / blood vessels)					
Index of Dispersion About Average Rel. Loc. Index (cell type 1 / blood vessels)					
Average Relative Blood Vessel Loc. Index (cell type 2 / blood vessels)					
Index of Dispersion About Average Rel. Loc. Index (cell type 2 / blood vessels)					
		8			
Average Relative Blood Vessel Loc. Index (cell type n / blood vessels)					
Index of Dispersion About Average Rel. Loc. Index (cell type n / blood vessels)					

Figure 5

Figure 6

Tissue Population	Tissue Layer No
DNA (Type 1)	Average Amount Index
	Index of Dispersion About Average Amount
	Average Location Index
	Index of Dispersion About Average Location
DNA (Type 2)	Average Amount Index
	Index of Dispersion About Average Amount
	Average Location Index
	Index of Dispersion About Average Location
DNA (Type m)	Average Amount Index
	Index of Dispersion About Average Amount
	Average Location Index
	Index of Dispersion About Average Location
mRNA (Type 1)	Average Amount Index
	Index of Dispersion About Average Amount
	Average Location Index
	Index of Dispersion About Average Location
mRNA (Type 2)	Average Amount Index
	Index of Dispersion About Average Amount
	Average Location Index
	Index of Dispersion About Average Location
mRNA (Type m)	Average Amount Index
	Index of Dispersion About Average Amount
	Average Location Index
	Index of Dispersion About Average Location

Continued From
Figure 7

Cellular
Protein
(Type 1)

Average Amount Index
Index of Dispersion About Average Amount
Average Location Index
Index of Dispersion About Average Location

Cellular
Protein
(Type 2)

Average Amount Index
Index of Dispersion About Average Amount
Average Location Index
Index of Dispersion About Average Location

o
o

Cellular
Protein
(Type m)

Average Amount Index
Index of Dispersion About Average Amount
Average Location Index
Index of Dispersion About Average Location

Cellular
Lipid
(Type 1)

Average Amount Index
Index of Dispersion About Average Amount
Average Location Index
Index of Dispersion About Average Location

Cellular
Lipid
(Type 2)

Average Amount Index
Index of Dispersion About Average Amount
Average Location Index
Index of Dispersion About Average Location

o
o

Cellular
Lipid
(Type m)

Average Amount Index
Index of Dispersion About Average Amount
Average Location Index
Index of Dispersion About Average Location

↓

Continued on
Figure 7B

From Figure 7A

DNA (Type 1)	Average Amount Index
	Index of Dispersion About Average Amount
	Average Location Index
	Index of Dispersion About Average Location
DNA (Type 2)	Average Amount Index
	Index of Dispersion About Average Amount
	Average Location Index
	Index of Dispersion About Average Location
DNA (Type m)	Average Amount Index
	Index of Dispersion About Average Amount
	Average Location Index
	Index of Dispersion About Average Location

Figure 7B

Tissue Pop.	Indices		
	Structural Indices (Figs. 5, 5A)	Mechanical Indices (Fig. 6)	Cell Function Indices (Figs. 7, 7A, 7B)
Lung			
Intestine	"	"	"
Cartilage	"	"	"
Eye	"	"	"
Bone	"	"	"
Fat	"	"	"
Muscle	"	"	"
Kidney	"	"	"
Brain	"	"	"
Heart	"	"	"
Liver	"	"	"
Skin	"	"	"

Figure 8

Whole Tissue Biopsy

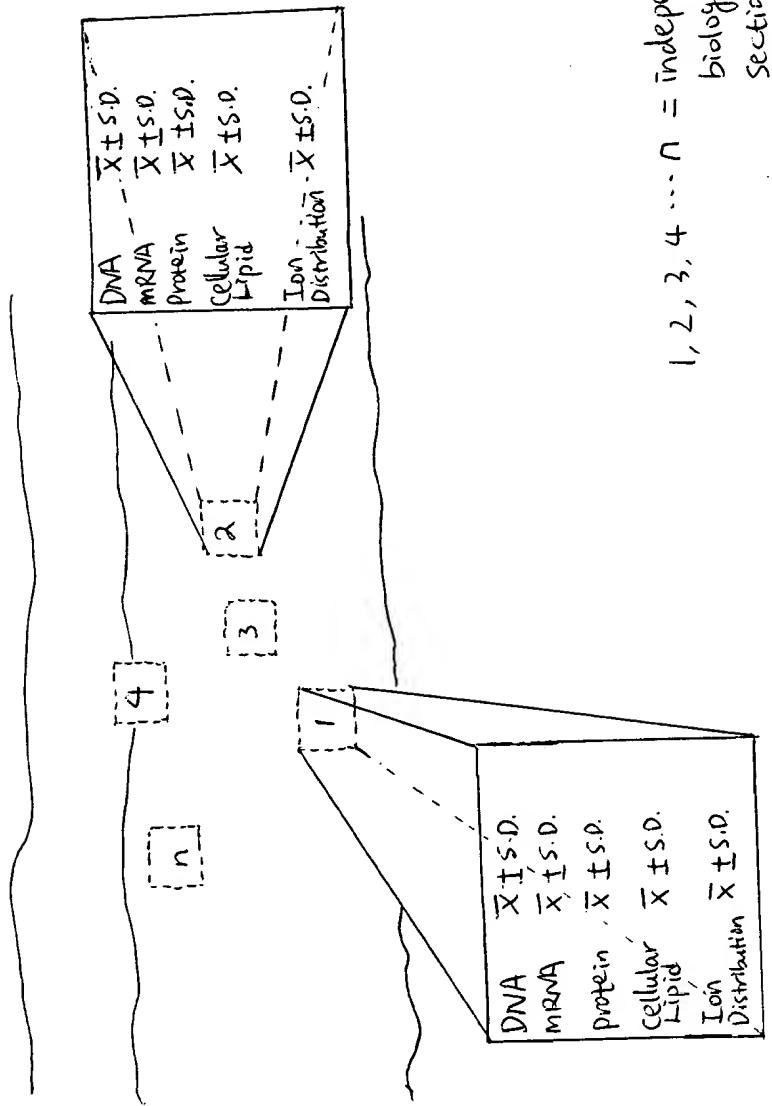


Figure 9

Figure 10

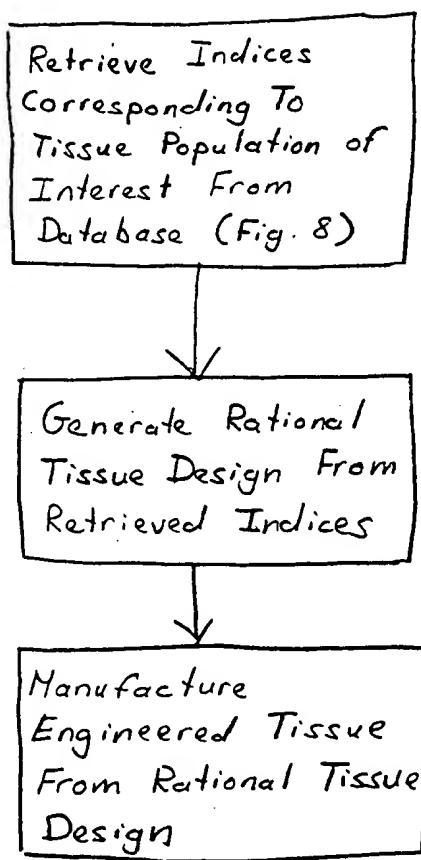


Figure 11

